COLORADO RIVER RECOVERY PROGRAM FY2001 ANNUAL PROJECT REPORT

RECOVERY PROGRAM PROJECT NUMBER: C-23

I. Project Title: Fish Passage at the Grand Valley Project Diversion Dam.

II. Principal Investigator(s): Bob Norman

Bureau of Reclamation

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- III. Project Summary: Provide fish passage at this, the most upstream of the three diversion dams on the Colorado River near Grand Junction, Colorado. This will be a selective passage structure if selective passage is not constructed at the Price-Stubb fish passage.
- IV. Study Schedule: Started on river modeling and conceptual designs in FY01. A Biological Assessment has been prepared and the FWS is working on a Biological Opinion. An internal draft of the Environmental Assessment has been prepared. Construction is scheduled to start in FY03.
- V. Relationship to RIPRAP: Colorado River Action Plan: Mainstem II.B.3.
- VI. Accomplishment of FY 01 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings: A conceptual analysis study for the fish passageway and fish screen was completed December 20, 2000. This analysis looked at a preliminary design for a "Redlands" style fish passage as well as a rock channel passage. Both passage options went through the dam in the left bay. A previous study indicated that one bay can be used for fish passage and not impact upstream flooding. The cost of the rock type passage was significantly higher than the concrete passage. One of the main contributing factors in the rock passage was the length required. Length is dictated by the height of the dam and the slope of the rock channel. Reclamation's Denver Technical Center Hydraulic Lab constructed a full size section of a rock-type fish passage with an adjustable channel slope. Through this work it was determined that the 1 percent slope used during the conceptual analysis can be increased to 2.5 percent and maintain passage and channel stability. Reclamation then prepared a cost estimate for a rock-type fish passage with the steeper slope. With the steeper slope, the rock-style passage ~10-15% higher in cost than a Redlands-type ladder.
- VII. Recommendations: Reclamation will proceed with the design and construction of a rock-type fish passage structure. The structure will include a fish trap.
- VIII. Project Status: Scheduled for construction in FY2003

IX. FY 01 Budget Status

- A. Funds Provided: \$114,008
- B. Funds Expended: \$114,008
- C. Difference:
- D. Percent of the FY 01 work completed, and projected costs to complete: It is anticipated that approximately \$200,000 will be necessary to complete design and specifications. Construction cost is expected to be about \$2,250,000 to \$2,500,000.
- E. Recovery Program funds spent for publication charges: None
- X. Status of Data Submission (Where applicable): N/A
- XI. Signed: Robert Norman 1/23/02
 Principal Investigator Date